

A) Amendments to the Claims:

Claim 1 (currently amended): A substrate temperature apparatus for measuring the temperature of a substrate, said apparatus comprising:

a chip made of metal material reflecting infrared rays and other electromagnetic waves;

said chip having an insertion opening for inserting thermocouple wires and which chip is crushed and thereby deformed with said thermocouple wires inserted to unite said chip together with said thermocouple wires;

said chip contacted with said substrate; and

a supporting member or members, made of material of lower thermal conductivity than said chip, supporting said chip.

Claim 2 (previously presented): A substrate temperature measurement apparatus according to claim 1 which is provided with pushing means for pushing said chip against said substrate.

Claim 3 (previously presented): A substrate temperature measurement apparatus according to claim 1 which is provided with shaking means for enabling said chip to shake on said supporting member.

Claim 4 (previously presented): A substrate temperature measurement apparatus according to claim 1 in which said chip is made of any one material selected from Al, Cu, Pt, Au and Ag.

Claim 5 (previously presented): A substrate temperature measurement apparatus according to claim 1 in which said supporting member is made of quartz material.

Claim 6 (previously presented): A substrate temperature measurement apparatus according to claim 1 in which said insertion opening is so shifted from the center of said chip that the distance between said insertion opening and the contact point of said substrate and said chip is no longer than the distance between the portion of said chip facing to said support member and said insertion opening.

Claims 7 - 13 (canceled).

Claim 14 (currently amended): A method for measuring the temperature of a substrate, the method comprising:

providing a chip of metal material which reflects infrared rays and other electromagnetic waves;

inserting thermocouple wires into an insertion opening provided in said chip;

crushing and thereby deforming said chip with said thermocouple wires inserted to unite said chip and said thermocouple wires together;

contacting said crushed chip with said substrate; and

supporting said chip with a material of lower thermal conductivity than said chip.

Claim 15 (previously presented): The method of claim 14, including the step of constantly urging said chip against said substrate.

Claim 16 (previously presented): The method of claim 14, including the step of shaking said chip on said supporting member.

Claim 17 (previously presented): The method of claim 14, wherein said chip is made of any one material selected from Al, Cu, Pt, Au and Ag.

Claim 18 (previously presented): The method of claim 14, wherein said supporting member is made of quartz material.

Claim 19 (previously presented): The method of claim 14, wherein said insertion opening is so shifted from the center of said chip that the distance between said insertion opening and the contact point of said substrate and said chip is no longer than the distance between the portion of said chip facing to said support member and said insertion opening.

Claim 20 (previously presented): The method of claim 14, wherein said chip is contacted with a back surface of said substrate, a front surface of which receives infrared rays or electromagnetic waves.